PCT

(30) Priority Data:

PP 6738/98





INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶:

F16L 59/02, 59/14

A1

(11) International Publication Number: WO 00/25058

(43) International Publication Date: 4 May 2000 (04.05.00)

AIJ

(21) International Application Number: PCT/AU99/00922

(22) International Filing Date: 25 October 1999 (25.10.99)

(71) Applicant (for all designated States except US): BAINS
HARDING LIMITED (AU/AU): 21 King Edward Road.

26 October 1998 (26.10.98)

HARDING LIMITED [AU/AU]; 21 King Edward Road, Osborne Park, W.A. 6017 (AU).

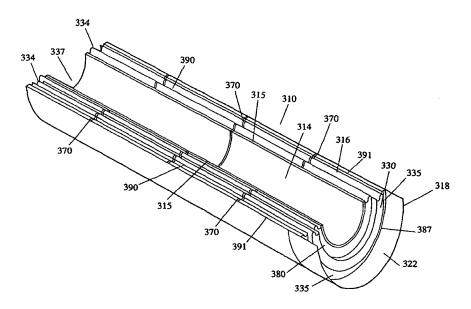
(72) Inventor; and
(75) Inventor/Applicant (for US only): VUJIC, Milivoj [AU/AU];
24 Wheyland Street, Willagee, W.A. 6156 (AU).

(74) Agent: WATERMARK PATENT & TRADEMARK ATTOR-NEYS; Durack Centre, 4th floor, 263 Adelaide Terrace, Perth, W.A. 6000 (AU). (81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published

With international search report.

(54) Title: INSULATION MODULE, SYSTEM AND METHOD FOR INSTALLATION AND MANUFACTURE



(57) Abstract

Disclosed is a pre-formed insulation module (310, 320) for insulating a process component having opposed longitudinally extending contacting surfaces (390) extending along a length thereof and terminal contacting surfaces (337, 387) at each end thereof comprising: a) at least one first inner insulation layer (314) being constituted of an insulation material having suitable thermal shock characteristic under cryogenic conditions and having one surface (314d) proximate or contacting with a component to be insulated; b) at least one second outer insulation layer disposed radially outwardly of said inner insulation layer (314); c) at least one water vapour barrier layer (319); d) a cladding layer (318).

FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AL	Albania	ES	Spain	LS	Lesotho	SI	Slovenia
AM	Armenia	FI	Finland	LT	Lithuania	SK	Slovakia
AT	Austria	FR	France	LU	Luxembourg	SN	Senegal
AU	Australia	GA	Gabon	LV	Latvia	SZ	Swaziland
ΑZ	Azerbaijan	GB	United Kingdom	MC	Monaco	TD	Chad
BA	Bosnia and Herzegovina	GE	Georgia	MD	Republic of Moldova	TG	Togo
BB	Barbados	GH	Ghana	MG	Madagascar	TJ	Tajikistan
BE	Belgium	GN	Guinea	MK	The former Yugoslav	TM	Turkmenistan
BF	Burkina Faso	GR	Greece		Republic of Macedonia	TR	Turkey
BG	Bulgaria	HU	Hungary	ML	Mali	TT	Trinidad and Tobago
BJ	Benin	1E	Ireland	MN	Mongolia	UA	Ukraine
BR	Brazil	IL	Israel	MR	Mauritania	UG	Uganda
BY	Belarus	IS	Iceland	MW	Malawi	us	United States of Americ
CA	Canada	IT	Italy	MX	Mexico	UZ	Uzbekistan
CF	Central African Republic	JP	Japan	NE	Niger	VN	Viet Nam
CG	Congo	KE	Kenya	NL	Netherlands	YU	Yugoslavia
CH	Switzerland	KG	Kyrgyzstan	NO	Norway	zw	Zimbabwe
CI	Côte d'Ivoire	KP	Democratic People's	NZ	New Zealand		
CM	Cameroon		Republic of Korea	PL	Poland		
CN	China	KR	Republic of Korea	PT	Portugal		
CU	Cuba	KZ	Kazakstan	RO	Romania		
CZ	Czech Republic	LC	Saint Lucia	RU	Russian Federation		
DE	Germany	LI	Liechtenstein	SD	Sudan		
DK	Denmark	LK	Sri Lanka	SE	Sweden		
EE	Estonia	LŔ	Liberia	SG	Singapore		

INTERNATIONAL SEARCH REPORT

International application No.
PCT/AU 99/00922

A.	CLASSIFICATION OF SUBJECT MATTER				
Int Cl ⁶ :	F16L 59/02, 59/14				
According to	International Patent Classification (IPC) or to both	national classification and IPC			
В.	FIELDS SEARCHED				
Minimum docu F16L 59/-	mentation searched (classification system followed by cl	lassification symbols)			
Documentation	searched other than minimum documentation to the ext	ent that such documents are included in t	the fields searched		
Electronic data	base consulted during the international search (name of	data base and, where practicable, search	terms used)		
C.	DOCUMENTS CONSIDERED TO BE RELEVANT				
Category*	Citation of document, with indication, where app	propriate, of the relevant passages	Relevant to claim No.		
x	GB 2 296 749 A (VILLAIN S.A.) 10 July 1996 whole of document	1-5, 11-13			
х	EP 297 612 A (E. MISSEL GmbH & Co) 1 July whole of document	1			
x	Derwent Abstract Accession Number 97-035858 December 1996 abstract	, DE 29 618 681 U (HOEFLER) 12	1		
X	Further documents are listed in the continuation of Box C	X See patent family ar	nnex		
* Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published after the international filing date or priority date and not in conflict with the application but cited understand the principle or theory underlying the invention document of particular relevance; the claimed invention cann be considered novel or cannot be considered novel or cannot be considered to involve an inventive step when the document of particular relevance; the claimed invention cann be considered to involve an inventive step when the document of particular relevance; the claimed invention cann be considered to involve an inventive step when the document of particular relevance; the claimed invention cann be considered to involve an inventive step when the document of particular relevance; the claimed invention cann be considered to involve an inventive step when the document of particular relevance; the claimed invention cann be considered to involve an inventive step when the document of particular relevance; the claimed invention cann be considered to involve an inventive step when the document of particular relevance; the claimed invention cann be considered to involve an inventive step when the document of particular relevance; the claimed invention cann the considered to involve an inventive step when the document of particular relevance; the claimed invention cann the considered to involve an inventive step when the document of particular relevance; the claimed invention cann the considered to involve an inventive step when the document of particular relevance; the claimed invention cann the co					
Date of the ac	rual completion of the international search	Date of mailing of the international search report			
08 December		23 December 1999 (23.12.99)			
AUSTRALIA PO BOX 200, E-mail addres	ling address of the ISA/AU N PATENT OFFICE WODEN ACT 2606, AUSTRALIA s: pct@ipaustralia.gov.au (02) 6285 3929	Authorized officer GARETH COOK Telephone No.: (02) 6283 2541			

INTERNATIONAL SEARCH REPORT

International application No. PCT/AU 99/00922

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT					
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.			
A	FR 2 752 191 A (INRS. INST. RECH. & SECURITE PREVENTION) 13 February 1998 whole of document	1			

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No. **PCT/AU 99/00922**

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Do	cument Cited in Search Report	Patent Family Member						
GB	2 296 748	BE	100 965	DE	19 600 249	FR	2 729 210	
		PT	101 810					
EP	297 612	DE	3 721 787					
FR	2 752 191	FR	2 752 192					